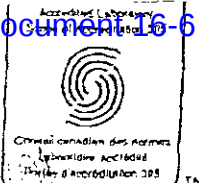


FORENSIC LABORATORY SERVICES -
A NATIONAL POLICE SERVICE



SERVICE DES LABORATOIRES JUDICIAIRES -
UN SERVICE NATIONAL DE POLICE

TO / À

OIC RCMP Vernon Detachment
3402 - 30th Street
Vernon, BC V1T 5E5
Attn: Cst. K. E. Johnston

SECURITY CLASSIFICATION - CLASSIFICATION SÉCURITAIRE

PROTECTED A

YOUR FILE NO. - VOTRE DOSSIER N°

1979-7377

FROM - DE

Forensic Laboratory Services - Vancouver
R.C.M. Police
5201 Heather Street
Vancouver, BC V5Z 3L7
(Biology Section)

LAB. FILE NO.
DOSSIER DU LAB. N°

2003V-478

SECTION REPORT NO.
RAPPORT DE LA SECT.

1

DATE

2004 June 28

REFERENCE - RÉFÉRENCE

SOMERSET Tavin Christine (Complainant)
C.C.C. 146, Sex With Female Under 14
Vernon, BC

COPIES TO / COPIES À

EXHIBITS RE-EXAMINED:

- a) Complainant: Exhibit A: one blue flowered tank top
Exhibit B: pair of plaid slacks
Exhibit E: swab and clot from vagina (taken to be known blood sample)
- b) Scene: Exhibit G: red sweater
Exhibit L: grass and leaf
Exhibit M: grass

Please refer to the Serology Section (pre-Evidence Recovery Unit) Ist Laboratory Report prepared by C/M N.L.Ziegler dated 14 Aug 79 for further information on the receipt, examination and disposition of exhibits at that time.

FORENSIC ANALYSIS:

1. Examination of exhibits was conducted by Evidence Recovery Unit support staff in accordance with the Evidence Recovery Unit Methods Guide to determine the presence of blood, semen and hair, where applicable, using established macroscopic, biochemical and microscopic procedures. Portions of Exhibits A, B, E, G, L and M were removed for AmpF/STR Profiler PlusTM DNA analysis.
2. Exhibits were processed by Biology support staff in accordance with the Biology Section Methods Guide, in order to generate DNA typing profiles using established Polymerase Chain Reaction (PCR) procedures for the AmpF/STR Profiler PlusTM system.
3. Interpretation of genetic profiles was conducted to determine any forensically significant associations among biological materials isolated from the exhibits.

DEFENDANT'S
EXHIBIT

Security Classification / Classification sécuritaire PROTECTED A			
Page	2	of	5
Lab. File No. / N° de dossier du lab. 2003V-478			

REFERENCE / RÉFÉRENCE

SOMERSET, Tavin Christine
C.C.C. 146, Sex With Female Under 14
Vernon, BC

CONCLUSIONS:

1. Blood was found on Exhibits B (pair of plaid slacks [inside crotch]) and G (red sweater [Areas AB: inside collar; and AC: inside left arm]).
2. Material indicative of blood was found of Exhibits A (one blue flowered tank top [three areas on outside]), E (swab and clot from vagina), G (red sweater [area AB: inside collar]), L (grass and leaf [areas AA: stain from grass; AB: stain from grass; AC: stain from leaf; AD: two stains from grass; and AE: two stains from grass]) and M (grass [areas AA: stain from twig; AB: stain from grass; AC: two stains from grass; and AD: stain from grass]), however the presence of blood cannot be confirmed.
3. Semen was found on Exhibit B (pair of plaid slacks [area AA: rear left side]).
4. Material indicative of semen was found on Exhibit E (swab and clot from vagina), however the presence of semen cannot be confirmed.
5. Semen was not found on Exhibits A (one blue flowered tank top), B (pair of plaid slacks [areas AB: inside crotch; and AC: inside rear]), G (red sweater [areas AD: outside front; AE: outside front; and AF: inside front]), L (grass and leaf) and M (grass).
6. Hair suitable for DNA testing was found on Exhibit G (red sweater).
7. Hair was not found on Exhibits A (one blue flowered tank top), B (pair of plaid slacks), L (grass and leaf) and M (grass).
8. The DNA typing profiles obtained from Exhibits G (red sweater [area AC: inside left arm]) and L (grass and leaf [area AA: stain from grass]) match that of the profile obtained from Exhibit E (SOMERSET, Tavin Christine). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion.
9. The DNA typing profiles obtained from Exhibits B (pair of plaid slacks [area AB: inside crotch]) and G (red sweater [areas AD: outside front; and AF: inside front]) are of mixed origin consistent with having originated from two individuals. The male components of the DNA typing profiles obtained from these exhibits match one another and are consistent with having originated from an unknown male individual. This profile has been personally designated as **Male 1**. The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 42 billion. The female components of the DNA typing profiles obtained from these exhibits match the DNA profile from Exhibit E (SOMERSET, Tavin Christine). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion.

Page	3	o/de	5
Lab. File No. / N° de dossier du lab.			
2003V-478			

REFERENCE / REFERENCE

SOMERSET, Tavin Christine
C.C.C. 146, Sex With Female Under 14
Vernor, BC

10. The DNA typing profiles obtained from Exhibits A (one blue flowered tank top [area AC: outside. Side 2]) and B (pair of plaid slacks [area AA: outside rear left side]) are of mixed origin consistent with having originated from two individuals. The male components of the DNA typing profiles obtained from these exhibits match the **Male 1** DNA profile. The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 42 billion. The donor of the known sample, Exhibit E (SOMERSET, Tavin Christine) cannot be excluded as a potential contributor to the female components of these mixed profiles.

11. The DNA typing profile obtained from Exhibit M (grass [area AB: stain from grass]) is of mixed origin consistent with having originated from two individuals. The profile of the major component matches that of the known sample, Exhibit E (SOMERSET, Tavin Christine). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion. The donor of the **Male 1** DNA typing profile cannot be excluded as a potential contributor to the minor component of this mixed profile.

12. The DNA typing profiles obtained from Exhibits G (red sweater [area AB: inside collar]) and M (grass [area AC: two stains from grass]) are of mixed origin consistent with having originated from at least two individuals with a minimum of one individual being a male. The profile of the major component matches that of the known sample, Exhibit E (SOMERSET, Tavin Christine). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion. The trace component of this mixed DNA profile has limited genetic information and no meaningful comparison can be made to any samples.

13. The DNA typing profile obtained from Exhibit A (one blue flowered tank top [area AA: outside of tank top]) is of mixed origin consistent with having originated from at least two individuals with a minimum of one individual being a male. The profile of the female component matches that of the known sample, Exhibit E (SOMERSET, Tavin Christine). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion. The trace component of this mixed DNA profile has limited genetic information and no meaningful comparison can be made to any samples.

14. The partial DNA typing profile obtained from Exhibit M (grass [area AD: stain from grass]) is of mixed origin consistent with having originated from at least two individuals with a minimum of one individual being a male. The donor of the known sample, Exhibit E (SOMERSET, Tavin Christine) cannot be excluded as a potential contributor to this mixed DNA profile. The trace component of this mixed DNA profile has limited genetic information and no meaningful comparison can be made to any samples.

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2003V-478			
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SOMERSET, Tavin Christine C.C.C. 146, Sex With Female Under 14 Vernon, BC			

15. The partial DNA typing profile obtained from Exhibit A (one blue flowered tank top [area AB: outside of tank top]) is of mixed origin consistent with having originated from two individuals. The donor of the known sample, Exhibit E (SOMERSET, Tavin Christine) cannot be excluded as a potential contributor to the female component of this mixed profile. The donor of the **Male 1** DNA profile cannot be excluded as a potential contributor to the male component of this mixed profile.

16. The DNA typing profile obtained from Exhibit B (pair of plaid slacks [area AC: inside rear]) is of mixed origin consistent with having originated from three or more individuals. The donor of the known sample, Exhibit E (SOMERSET, Tavin Christine) cannot be excluded as a potential contributor to the female component of this mixed profile. The donor of the **Male 1** DNA profile cannot be excluded as a potential contributor to the male component of this mixed profile. The trace component of this mixed DNA profile has limited genetic information and no meaningful comparison can be made to any samples

17. No DNA typing profile was obtained from Exhibits L (grass and leaf [areas AB: stain from grass; AC: stain from leaf; AD: two stains from grass; AE: two stains from grass]) and M (grass [area AA: stain from twig]).

18. Insufficient human DNA to perform AmpFSTR Profiler Plus™ DNA typing was obtained from Exhibit G (red sweater [area AE: outside front]).

19. No human DNA was detected in the extract of Exhibit E (area AA: clot from vagina).

REMARKS:

1. The DNA typing profile obtained from Exhibit B (**Male 1**) will be entered in the National Crime Scene Index of the National DNA Data Bank of Canada. It is the responsibility of the investigating agency to request the removal of DNA profiles from the National DNA Data Bank of Canada when required by law.

2. The results reported in Conclusions #1 through 7 inclusive are for the evidence recovery examinations carried out by the Evidence Recovery Unit at the Forensic Laboratory Services Vancouver during March and April of 2003.

3. AmpFSTR Profiler Plus™ is a Short Tandem Repeat (STR) multiplex manufactured by Applied Biosystems, a Division of Perkin-Elmer, which tests the following genetic regions: D3S1358, vWA, FGA, amelogenin, D8S1179, D21S11, D18S51, D5S818, D13S317 and D7S820.

4. Exhibits A, B, E, G, L and M were received by the Case Receipt Unit at RCMP Forensic Laboratory Services Vancouver via Priority Courier (GL 366 173 132 CA) on 2003 March 10. Further information on the receipt, examination and disposition of exhibits is retained at this laboratory.

RAPPORT DU LABORATOIRE JUDICIAIRE		Security Classification / Classification sécuritaire PROTECTED A	
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Lab. File No. / N° de dossier du lab.		2003V-478	
REFERENCE / RÉFÉRENCE SOMERSET, Tavin Christine C.C.C. 146, Sex With Female Under 14 Vernon, BC			

5. Exhibits pertaining to this case, as well as the associated DNA extraction tubes, will be returned by the Case Receipt Unit at a later date. Extracted DNA from exhibits pertaining to this case will be forwarded to the "E" Division Central Exhibit Control Facility (604-264-2438).
6. Additional DNA from Exhibits E (swab and clot from vagina [area AC: swab tip]), L (grass and leaf [areas AB: stain on grass; AC: stain on leaf; and AE: two stains on grass]) and M (grass [area AA: stain on twig]) is available if required for additional DNA testing.
7. Should additional analysis be required, please contact the Case Receipt Unit of Forensic Laboratory Services Vancouver at 604-264-3578.
8. Results reported in this document apply only to the items tested.
9. This report is intended to be used only as the complete document, including named appendices and attachments.

Submitted by:

Howard Kalyn

Howard Kalyn, B.Sc. (Honours), CM
 Biology Section
 Tel. 604-264-3448
 Fax 604-264-3499
 howard.kalyn@rcmp-grc.gc.ca

/hk

Forensic Laboratory Services Report		Rapport des Services de laboratoire judiciaire	
Biology Services		Services de biologie	
This report and its contents may not be published in whole or in part without the written consent of the Commissioner of the Royal Canadian Mounted Police.		Il est interdit de publier en tout ou en partie ce rapport et son contenu sans le consentement par écrit du Commissaire de la Gendarmerie royale du Canada	
To - A: OIC, RCMP Vernon Municipal Detachment 3402 30TH ST Vernon, BC V1T 5E5 Attn: Cst Kevin Cyr		From - De: Brian Beevers Biology Section Forensic Laboratory Services Vancouver 5201 Heather Street Vancouver, BC V5Z 3L7	
Your File No./Votre n° de dossier: 1979-7377 Reference/Référence: SOMERSET, Tavin Christine, Complaint of Sex with Female Under 14, Vernon, B.C.		Lab File No./N° de dossier du lab: 2003V-000478 Security Class./Class. sécuritaire: Protected - A Date of Issue/Date d'émission: 2007-11-07 Section Report No./N° de rapport de la sect: Two	

Reference Documentation:

Biology report #1 dated 2004 June 28

Summary of Key Findings / Results:

1. The profile obtained from exhibit 6 (VENTLING, W.) matches that of the Male 1 profile.

Please refer to Conclusions for a complete record of forensic results.

Exhibit(s) Examined:

Exhibit No.	Lab No.	Description	Source
6	0007	buccal swab (known sample)	VENTLING, Wilbur
Exhibit Previously Examined:			
G	0004	one red sweater	Scene
DNA Profiles Previously Obtained:			
A	0001	one blue flowered tank top (areas AB and AC: each outside, side 2)	SOMERSET, Tavin
B	0002	one pair of plaid slacks area AA: outside rear left side, area AB: inside crotch, area AC: inside rear	SOMERSET, Tavin
G	0004	one red sweater area AD: outside front, area AF: inside front	Scene
M	0005	one bag of grass area AB: stain from grass	Scene
E	0003	swab and blood clot of victims vagina	SOMERSET, Tavin

Forensic Analysis:

The examination of exhibit 6 was conducted at Forensic Laboratory Services Vancouver by Evidence Recovery Unit support staff in accordance with the Evidence Recovery Unit Methods Guide to recover trace biological evidence

Your File No./Votre n° de dossier:	1979-7377	Date of Issue/Date d'émission:	2007-11-07
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Exhibit 5 was processed at Forensic Laboratory Services Vancouver by Biology support staff in accordance with the Biology Section Methods Guide.

Interpretation and comparison of the genetic data was conducted at Forensic Laboratory Services Vancouver in accordance with the Biology Section Methods Guide.

Conclusion(s):

DNA Conclusions:

1. The DNA typing profiles obtained from exhibits B (plaid slacks [area AB: inside crotch]) and G (red sweater [areas AD: outside front and AF: inside front]) are of mixed origin consistent with having originated from two individuals. The profile of the male components of the DNA typing profiles obtained from these exhibits match that of the known sample exhibit 6 (VENTLING, W.). This profile was previously designated "Male 1". The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 42 billion. The profile of the female components of the DNA typing profiles obtained from these exhibits match that of the known sample exhibit E (SOMERSET, T.). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion.
2. The DNA typing profiles obtained from exhibits A (tank top [area AC: outside, side 2]) and B (plaid slacks [area AA: outside rear left side]) are of mixed origin consistent with having originated from two individuals. The profile of the male components of the DNA typing profiles obtained from these exhibits match that of the known sample exhibit 6 (VENTLING, W.). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 42 billion. The donor of the known sample, exhibit E (SOMERSET, T.) cannot be excluded as a possible contributor to the female components of these mixed profiles.
3. The DNA typing profile obtained from exhibit M (grass [area AB: stain from grass]) is of mixed origin consistent with having originated from two individuals. The profile of the major component matches that of the known sample, exhibit E (SOMERSET, T.). The estimated probability of selecting an unrelated individual at random from the Canadian Caucasian population with the same profile is 1 in 170 trillion. The donor of exhibit 6 (VENTLING, W.) cannot be excluded as a possible contributor of the minor component of this mixed profile.
4. The partial DNA typing profile obtained from exhibit A (tank top [area AB: outside, side 2]) is of mixed origin consistent with having originated from two individuals. The donor of the known sample, exhibit E (SOMERSET, T.) cannot be excluded as a possible contributor to the female component of this mixed profile. The donor of the known sample, exhibit 6 (VENTLING, W.) cannot be excluded as a possible contributor to the male component of this mixed profile.
5. The DNA typing profile obtained from exhibit B (plaid slacks [area AC: inside rear]) is of mixed origin consistent with having originated from three or more individuals. The donor of the known sample, exhibit E (SOMERSET, T.) cannot be excluded as a possible contributor of the female component of this mixed profile. The donor of the known sample, exhibit 6 (VENTLING, W.) cannot be excluded as a possible contributor to the male component of this mixed profile. The trace component of this mixed DNA profile has limited genetic information and no meaning comparison can be made to any samples.
6. No human DNA was obtained from exhibit G (red sweater, [hair suitable for DNA testing]). See Remark #1.

Remarks:

1. DNA testing results from exhibit G (red sweater, [hair suitable for DNA testing]) was not reported in Biology report #1.
2. All exhibits will be returned. A complete record of exhibit continuity (receipt, examination and disposition) within the Forensic Laboratory Services is available upon request to the Case Receipt Unit (CRU), 1-866-NPS-LABS (1-866-677-5227).

Your File No./Votre n° de dossier:	1S79-7377	Date of Issue/Date d'émission:	2007-11-07
Lab File No./N° de dossier du lab:	2003V-000478	Section Report No./N° de rapport de la sect.	Two

3. DNA typing profiles were generated using established Polymerase Chain Reaction (PCR) procedures within the AmpFISTR® Profiler Plus (TM) system. AmpFISTR® Profiler Plus (TM) is a Short Tandem Repeat (STR) multiplex which tests the following genetic regions of the DNA molecule: D3S1358, vWA, FGA, amelogenin, D8S1179, D21S11, D18S51, D5S818, D13S317 and D7S820.
4. Information reported in this document applies only to the exhibits/items tested. This report is intended to be used as a complete document including any named appendices and attachments.
5. Should additional analysis be required, please contact the Case Receipt Unit.

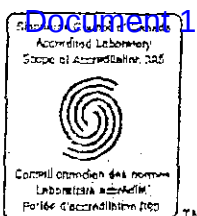
Submitted by:

B. Beavers

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 Email: brian.beevers@rcmp-grc.gc.ca
 Phone: 604-264-3444

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FORENSIC LABORATORY SERVICES -
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IL EST INTERDIT DE PUBLIER EN TOUT OU EN PARTIE CE RAPPORT OU TOUTE DOCUMENTATION PHOTOGRAPHIQUE OU AUTRE S'Y RAPPORANT SANS LE CONSENTEMENT PAR ÉCRIT DU COMMISSAIRE DE LA GENDARMERIE ROYALE DU CANADA

SERVICE DES LABORATOIRES JUDICIAIRES -
UN SERVICE NATIONAL DE POLICE

TO / À [O.I.C. VERNON DETACHMENT [Attention] Cst. Ken JOHNSTON, Vernon G.I.S.]		SECURITY CLASSIFICATION - CLASSIFICATION SÉCURITAIRE PROTECTED A	
FROM / DE Forensic Laboratory Vancouver R.C.M. Police 5201 Heather Street Vancouver, BC V5Z 3L7 (Regional Forensic Identification Support Service - 2003 APR 14)		LAB. FILE NO. DOSSIER DU LAB. N° [99V01621]	SECTION REPORT NO. RAPPORT DE LA SECT. N° [Report # (2)]
REFERENCE - RÉFÉRENCE SOMERSET, - Rape of Vernon, B.C. - 79 MAY 27		DATE 1999 SEP 13	
		COPIES TO / COPIES À N.C.O. i/c Vernon F.I.S. O.I.C. Pacific Region Forensic Ident Services	

On 2003 March 14, I received a package from Cst. Ken JOHNSTON, containing the original documents, fingerprints and correspondence which I had used in my initial fingerprint verification examination and subject of my report dated 99 SEP 13. Cst. JOHNSTON requested that I examine and compare the original RCMP Form C-216, dated 79-9-10 with the enclosed fingerprint form copy provided by the Las Vegas Metropolitan Police Department.

On 2003 April 14 I compared the fingerprints on the RCMP form C-216, signed by John J. STEWART, dated 79/09/09 and initialed in the bottom left corner, B.B.S. (Blake Lynch-Staunton) 79/9/10, with fingerprints on the Las Vegas Metropolitan Police Department Temporary Custody Record form LVMPD 22 photocopy, arrest dated 5/22/02, in the name of VENTLING, Wilbur James, date of birth 12/10/44.

I conclude that the fingerprints on RCMP Form C-216, dated 79-9-10 and the fingerprints on Las Vegas Metropolitan Police Department Temporary Custody Record form LVMPD 22 photocopy, arrest dated 5/22/02 were those of the same person.

Submitted by:


(J.T.D. MELLIS) S/Sgt.
i/c Vancouver R.F.I.S.S.

FORENSIC
LABORATORY REPORTRAPPORT DES LABORATOIRES
JUDICIAIRES

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TATION PHOTOGRAPHIQUE OU AUTRE
S'Y RAPPORTANT SANS LE CONSENTEMENT
PAR ÉCRIT DU COMMISSAIRE DE LA
GENDARMERIE ROYALE DU CANADA.

SECURITY CLASSIFICATION
CLASSIFICATION SÉCURITAIRE

DATE 99 SEP 13

LAB. FILE NO. : DOSSIER DU LAB. N°
99V01621YOUR FILE NO. : VOTRE DOSSIER N°
79 -170(IDENT)

TO : A

O.I.C. VERNON DETACHMENT

Attn: F.I.S. Sgt. FALLS

FROM : DU

REGIONAL FORENSIC IDENTIFICATION
SUPPORT SERVICE
Forensic Laboratory, Vancouver

REFERENCE - RÉFÉRENCE

SOMERSET, - Rape of
Vernon, B.C. - 79 MAY 27

COPIES TO - COPIES À

Info: Insp. E. PODWORNÝ

GENERAL:

As a result of a request received from Insp. Ed PODWORNÝ, O.I.C. FORENSIC IDENT. PACIFIC REGION, I examined the contents of retired Cpl. Blake Lynch-Staunton's key material envelope, 99 JUL 21, concerning the captionally noted case, for fingerprint identification purposes. The key material envelope contained correspondence, photographic negatives, photographs and a C216 fingerprint form in the name of John J. STEWART.

I examined the fingerprint negatives, photographs and C216 form of STEWART and determined that additional enhancement of the crime scene fingerprint would be of assistance in reaching my conclusions. In conjunction with Mrs. Catherine Osler-Britt, FLV document section examiner, we examined and digitally enhanced the submitted fingerprints without altering same. (Report from Osler-Britt attached)

CONCLUSIONS:

I concur with retired Cpl. Blake Lynch-Staunton's original fingerprint identification conclusion stated in case report dated 79-9-10. The photograph of the crime scene fingerprint in blood on a paper napkin and the left ring finger of the C216 Fingerprint form in the name of John J. STEWART belong to the same person.

All material provided by Insp. Ed PODWORNÝ, digital enhancement photographs and additional correspondence returned to Insp. PODWORNÝ.

Submitted by:


(J.T.D. MELLIS) S/Sgt.
R.F.I.S.S. Vancouver



SEROLOGICAL RESEARCH INSTITUTE

March 24, 2006

Michael J. Kennedy, FPD
Federal Public Defender's Office
411 East Bonneville, Suite 250
Las Vegas, NV 89101

SERI Case No. M'6889'06
Your Case No. C2000643
Suspects: Sohn Regas #31
Jason Peterson #44

ANALYTICAL REPORT

On March 5th 2006, Jason Peterson #44 attended the Serological Research Institute (SERI) for the purpose of obtaining a reference sample for DNA testing utilizing the Polymerase Chain Reaction (PCR).

ITEM 1 REFERENCE ORAL SWABS FROM JASON PETERSON (3/3/06)

This item consists of two oral swabs. A portion of one swab was sampled and extracted for DNA content. The extract was quantified, amplified by PCR and subjected to genetic marker analysis. The results are tabulated below.



[illegible]

Key:

NA	No activity.
X,Y	Male DNA.

Michael J. Kennedy, FPD
SERI Case No. M688906
March 24, 2006
Page 3 of 3

EXPLANATION

Deoxyribonucleic acid or DNA is found in nucleated cells, e.g., white blood cells, salivary, vaginal and tissue epithelial cells and spermatozoa. The DNA can be extracted and the amount obtained is proportional to the number of cells present.

Human DNA consists of a number of genetic marker or typing systems. The genetic marker systems typed in this laboratory are independent of each other and therefore can all be used to differentiate one sample from another. Thus, if two samples originate from the same source, they will exhibit the same characteristics. Similarly, if two samples exhibit different types, they must have originated from two sources. DNA from different sources may also exhibit the same genetic markers due to the limited number of marker types possible; therefore, a statistical frequency of occurrence of any combination of types is often provided to indicate the approximate number of individuals in a relevant group who may have those same genetic marker types.

The typing system utilized by this laboratory relies on identifying small specific sections of DNA wherein there are recognizable differences between people. There may be an elimination of a person using these systems, and if sufficient systems are utilized an identification to the exclusion of all others may be possible. The advantage of this method is that it requires substantially less DNA than earlier methods, as the recovered DNA can be amplified (increased in amount) in order to obtain successful typing. The amplification uses the Polymerase Chain Reaction (PCR) method.

Short Tandem Repeat (STR) markers are polymorphic DNA loci that contain a repeated nucleotide sequence. The STR repeat unit can be from two to seven nucleotides in length. STR loci can be amplified using the Polymerase Chain Reaction (PCR) process and the PCR products are then analyzed by electrophoresis to separate the alleles according to size. These markers are subsequently detected using fluorescent dye labeling. The following are STR markers: Amelogenin (gender identification), TH01, TPOX, CSF1PO, D3S1358, vWA, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317, D7S820, D2S1338, D16S539, and D19S433.

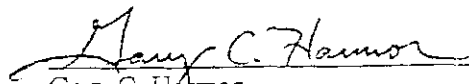
CONCLUSION

The fifteen genetic marker profile for Jason Peterson #44 (item 1) is listed in the table of results.

EVIDENCE DISPOSITION

Please advise as to the disposition of Item 1.

SEROLOGICAL RESEARCH INSTITUTE


Gary C. Hamor
Senior Forensic Serologist